



Contribution ID: 50

Type: **not specified**

## Branching fraction measurement of $B^0 \rightarrow \pi^+ \pi^- \mu^+ \mu^-$ using Run 1 and Run 2 LHCb data

*Monday 8 April 2019 15:45 (15 minutes)*

Flavour Changing Neutral Current processes are heavily suppressed in the Standard Model of particle physics and are potentially sensitive to contributions from as yet undiscovered particles. Recent measurements of  $b \rightarrow s$  transitions by the LHCb collaboration show interesting tensions with Standard Model predictions. The large LHC data set enables measurements of decays involving  $b \rightarrow d$  transitions to be made for the first time. In combination with the  $b \rightarrow s$  processes, these measurements will provide insights into the flavour structure of potential extensions to the Standard Model. The decay  $B^0 \rightarrow \rho^0 \mu^+ \mu^-$  is a particularly interesting  $b \rightarrow d$  process, which was first probed using LHCb's Run 1 dataset. Progress towards an updated branching fraction measurement, using both Run 1 and Run 2 data, will be presented. In addition, the prospects for an angular analysis of the decay are discussed.

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**Session Classification:** Parallel stream 4